

Remarks

These remarks are proper and serve to explain why the pending claims are in condition for allowance.

The specification has been amended to correct typographical errors.

Telephone Interview

At the outset, Applicant gratefully appreciates the Examiner reconsidering and withdrawing the previous anticipatory rejection over Abrashkevich '120. In a course of effective communications Applicant would expect that by obviating that rejection the substantive issues associated with it are resolved. However, Applicant's traversal of the present rejection over Nanda '876 is on the same basis as was previously stated for Abrashkevich '120. Applicant regrets that the telephone interview previously requested was not granted, believing that was a missed opportunity to advance this case on the merits. Applicant has requested another telephone interview herein, believing an interview is imperative before the Examiner takes the next action on the merits to resolve the apparent miscommunication.

Rejection Under Section 102(e)

Claims 1-2, 16, and 29-33 stand rejected as being anticipated by pending application Nanda '876 (now U.S. Pat. No. 6,965,972). Applicant respectfully traverses this rejection as being inappropriate in the law.

Claim 1

The Examiner has not substantiated a *prima facie* case of anticipation by failing to show that Nanda '876 identically discloses all the recited features of claim 1, which include at least the following:

A method of maintaining a directory for a data container comprising...reconstructing said sparse directory structure into a fully populated directory structure.
(excerpt of claim 1, emphasis added)

Nanda '876 discloses n FPGAs emulating an n-node shared memory multiprocessor system. Each FPGA controls a cache in the form of a fixed size sparse directory 300 which maintains state information for a subset of the memory lines in main memory (Nanda '876 paragraph [0005] lines 14-16).

The *fully populated directory structure* of the present embodiments means a data structure having a searchable entry for every single data block in a data space associated with the directory (see e.g. specification paragraph [0022] lines 1-2). The *sparse directory structure* of the present embodiments is distinguishable over Nanda '876 in that it is not utilized to maintain cache coherence. Rather, the *sparse directory structure* of the present embodiments is utilized to efficiently map a sparsely populated data space. One illustrative implementation of the *sparse directory structure* disclosed presently is that of a snapshot directory, which could contain only file changes since the time a snapshot of the data space was stored (see e.g. specification paragraph [0021]).

According to the present embodiments, when the number of entries in a *sparse directory structure* reaches a particular level it can become more efficient to map the data space instead with a *fully populated directory structure* (see e.g. specification paragraph [0047]). That is, each data space can be selectively mapped by either a *sparse directory*

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structure or a fully populated directory structure. Hence, the present embodiments as recited by the language of claim 1 contemplate reconstructing said sparse directory structure into a fully populated directory structure.

Nanda '876 is wholly silent regarding reconstructing its sparse directory 300; when it becomes full Nanda '876 discloses maintaining its structure but evicting entries (see e.g. Nanda '876 paragraph [0019] lines 16-18).

The Examiner has not substantiated a *prima facie* case of anticipation by failing to show in the record that Nanda '876 identically discloses *reconstructing said sparse directory structure into a fully populated directory structure* as recited by the language of claim 1. The Examiner's claim construction is unreasonably broad because it ignores the plain meaning of this recited phrase that is consistent with its usage in the specification, thereby effectively ignoring explicitly recited claim language. *In re Morris*, 43 USPQ2d 1753 (Fed. Cir. 1997) Furthermore, the examination resulting in this claim construction is incomplete according to the Examiner's obligation to consider the patentability of the invention as claimed. 37 CFR 1.104(a) Accordingly, any further rejection of claim 1 cannot properly be made final.

Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claim 1 and the claims depending therefrom.

Claim 16

The Examiner has not substantiated a *prima facie* case of anticipation by failing to show in the record that Nanda '876 identically discloses *a controller that...reconstructs said sparse directory structure into a fully populated directory structure.*

The Examiner's claim construction is unreasonably broad because it ignores the plain meaning of this recited phrase that is consistent with its usage in the specification, effectively ignoring explicitly recited claim language. *In re Morris* Furthermore, the examination resulting in this claim construction is incomplete according to the Examiner's obligation to consider the patentability of the invention as claimed. 37 CFR 1.104(a) Accordingly, any further rejection of claim 16 cannot properly be made final.

Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claim 16 and the claims depending therefrom.

Claim 29

The Examiner has not substantiated a *prima facie* case of anticipation by failing to show in the record that Nanda '876 identically discloses *a controller configured for selectively constructing either a sparse directory structure...or a fully populated directory structure...for the same data container*.

The Examiner's claim construction is unreasonably broad because it ignores the plain meaning of this recited phrase that is consistent with its usage in the specification, effectively ignoring explicitly recited claim language. *In re Morris* Furthermore, the examination resulting in this claim construction is incomplete according to the Examiner's obligation to consider the patentability of the invention as claimed. 37 CFR 1.104(a) Accordingly, any further rejection of claim 29 cannot properly be made final.

Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claim 29 and the claims depending therefrom.

Rejection Under Section 103

Claims 3-5, 7-9, 17-19, 21-23, and 25-28 stand rejected as being unpatentable over Nanda '876 in view of Abrashkevich '120. Applicant respectfully traverses this rejection because Abrashkevich '120 does not cure the deficiencies of Nanda '876 discussed above, and because these claims depend from an allowable independent claim, for reasons above, and provide additional limitations thereto. Reconsideration and withdrawal of the present rejection are respectfully requested.

Conclusion

This is a complete response to the Office Action mailed September 22, 2006. Applicant respectfully requests passage of all pending claims to issuance.

Applicant has also submitted herewith a request for telephone interview, should this Amendment not result in all pending claims passing to allowance. The interview is necessary to facilitate progress on the merits where the unsubstantiated anticipatory rejections in the first and second actions have already caused unnecessary delays preventing the issuance of Applicant's valuable patent rights.

The Examiner is invited to contact the Attorneys listed below should any questions arise concerning this response or request for interview.

Respectfully submitted,

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